

REMARKS

Reconsideration of this application is respectfully requested.

Claims 20-35 are pending in the application, with Claims 20, 24, 27, 30 and 33 being the independent claims.

The Examiner rejected Claims 20-35 under 35 U.S.C. §103(a) as being unpatentable over “Inter-BS communication for IEEE 802.16e Handoff,” 2003-05-14 to *Koo et al.* (hereinafter, *Koo*).

Regarding the §103(a) rejection of the claims, the Examiner contends that *Koo* teaches, suggests, or renders obvious each and every element of the claims.

Claim 20 recites a method of performing a handover on a subscriber station in a target base station. A ranging request message including a base station identifier of a previous serving base station is received from the subscriber station when a drop situation is detected by the subscriber station. Information of the subscriber station is acquired through the base station identifier of the previous serving base station. A response message on the ranging request message is transmitted to the subscriber station. Network re-entry is performed on the subscriber station.

Koo illustrates a hand-over procedure in which a Mobile Subscriber Station (MSS) measures S/R, a serving base station sends a HO-notification to a target base station. The HO-notification includes a sender BS-ID, a target BS-ID, a unique identifier of the MSS, and an estimated time of the handover (see page 5). The subscriber station sends a ranging request to the target base station, and the target base station sends a ranging response to the subscriber station.

The Examiner relates the measurement of S/R at the MSS in *Koo* to the detection of a drop situation at the subscriber station in Claim 1. S/R is undefined in *Koo*, but is assumed to

represent a signal to noise ratio in a communication system. The detection of a signal to noise ratio relates to currently established communication sessions. Thus, *Koo* fails to disclose the detection of a drop situation by the subscriber station, as recited in Claim 20.

Koo fails to provide any disclosure indicating that the ranging request message from the subscriber station includes a base station identifier of a previous serving base station, as recited in Claim 20. In response to previous arguments, the Examiner maintains that “it is obvious for this base station identifier to be included in the ranging request message, because there would be some expectation to also include the serving BS-ID since the target base station would need to map the MS-ID with the serving BS-ID to acquire information related to mobile station so that appropriate services may be rendered to the MS.” Applicants respectfully disagree.

As described above, in *Koo*, the HO-notification provides identifiers of both the serving BS and the MS, as well as an estimated handover time. Accordingly, a mapping of the serving BS and the MS is provided to the target BS with the HO-notification. Therefore, *Koo* would not require a second mapping of the serving BS and the MS when the ranging request is received from the MS. Thus, there would be no expectation to also include a serving BS-ID in the ranging request of *Koo* because such a mapping would be redundant. As such, *Koo* teaches away from the inclusion of a serving BS-ID in the ranging request.

The present invention allows for network re-entry without the use of any prior HO-notification message (mapping) sent from a serving BS, by including the identifier of the previous BS in the ranging request message sent from the subscriber station to the target BS. This type of network re-entry is applicable when a service is dropped. Accordingly, *Koo* fails to teach, suggest or render obvious the reception of a ranging request message, which includes a base station identifier of a previous serving base station, at a target base station from a subscriber station when a drop situation is detected by the subscriber station, as recited in Claim 20. Thus, Claim 20 is patentable over *Koo*.

PATENT APPLICATION

Attorney Docket No.: 1403-20 PCT US (OPP20061491US)

The Examiner also rejected independent Claims 24, 27, 30 and 33 under 35 U.S.C. §103(a). Claims 24, 27, 30 and 33 recite subject matter similar to that of Claim 20. In view of the above, Claims 24, 27, 30 and 33 are also patentable over *Koo*.

Regarding Claims 21-23, 25, 26, 28, 29, 31, 32, 34 and 35, while not conceding the patentability of the dependent claims, *per se*, Claims 21-23, 25, 26, 28, 29, 31, 32, 34 and 35 are also patentable for at least the above reasons. Accordingly, Applicants assert that Claims 20-35 are allowable over *Koo*, and the rejection under 35 U.S.C. §103(a) should be withdrawn.

Accordingly, all of the claims pending in the Application, namely, Claims 20-35 are believed to be in condition for allowance. Should the Examiner believe that a telephone conference or personal interview would facilitate resolution of any remaining matters, the Examiner may contact Applicants' attorney at the number given below.

Respectfully submitted,



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